ILLINOIS.

ILLINOIS:

ITS HISTORY, CIVIL GOVERNMENT,

GEOGRAPHY, MAP DRAWING

—— AND ——

THE UNITED STATES SURVEYS

OF THE STATE, FROM THE ORIGINAL RECORDS,

TOGETHER WITH HISTORICAL NOTES AND

COPIOUS MAP EXERCISES.

By N. N. McCULLOUGH.

HISTORY AND GEOGRAPHY

Illinois lies between 37° and 42° 30′ north latitude, 87° 30′ and 91° 30′ west longitude ; and is bounded north by Wisconsin, east by Lake Michigan and Indiana, south by Kentucky, west by Missouri and Iowa.

The boundary rivers are the Mississippi, the Ohio and the Wabash.

Its area is variously given 55,410 to 56,650 square miles. The population is about 3,000,000.

The average elevation is 600 feet above the sea level, 290 feet in the south and 1000 feet in the extreme north.

The length is estimated by different authorities as 380 to 388 miles, the width 212 to 218 miles.

The navigable rivers are the Mississippi, Ohio Wabash, Illinois, Kaskaskia and Rock. The Illinois and Michigan canal connects the Illinois river and Lake Michigan.

There are about 8000 miles of railroad.

The estimated area of Illinois coal fields is 35,000 square miles.

The chief minerals are lead, iron, copper, coal and salt. Petroleum is found in the north-east, and lately in the central part of the State.

The geological strata succeed each other in the following order: Vegetable mould, clay, limestone, shell, bituminous coal; soapstone, sandstone.

Fire clay, potters' clay, and sand suitable for the manufacture of glass and cement are found.

Valuable medicinal springs are in various parts of the State.

The leading industries in the northern part are manufacturing, farming and stock raising ; in the southern, farming, especial attention being given to fruit and vegetables. There are immense strawberry and peach farms.

Paw paws, blackberries, grapes, plums and cherries; mulberries, hazel nuts, pecans, walnuts and hickory nuts, grow without cultivation in some sections.

The chief crops are wheat and Indian corn. Other important products are oats, rye, barley, beans, peas, potatoes and tomatoes ; tobacco and castor beans in the south. Grass is a valuable crop.

The trees of Illinois are hickory, elm, maple, black and white walnut, locust, ash, cottonwood, sycamore and oak. Pecan, cypress and gum in the southern part.

Illinois was discovered and settled by the French. Kaskaskia is given as the first permanent settlement and the date from 1673 to 1682. Peoria and Cahokia, it is claimed, were settled as early.

In 1763, at the close of the French and Indian War, the French ceded the country to the English. In 1778, during the Revolution, Col. George Rogers Clarke, acting under a commission from Patrick Henry, Governor of Virginia, captured Kaskaskia from the English.

Illinois formed a part of the Northwest Territory, organized in 1787. In 1800 it was made a part of Indiana Territory. In 1809 organized as Illinois Territory, capital at Kaskaskia. Admitted as a State 1818, capital changed to Vandalia and removed to Springfield in 1837.

LIST OF GOVERNORS.

1818—Shadrach Bond, St. Clair Co.

1822—Edward Coles, Madison Co.

1826—Ninian Edwards, Madison Co.

1830—John Reynolds, St. Clair Co. (Resigned.)

1834—Wm. L. Ewing, Fayette Co. (to fill vacancy.)

1834—Joseph Duncan, Morgan Co.

1838—Thomas Carlin, Greene Co.

1842—Thomas Ford, Ogle Co.

1846—Augustus C. French, Crawford Co.

1849—Augustus C. French, Crawford Co. (Re-elected under constitution of 1848.)

1853—Joel A. Matteson, Will Co.

1857—Wm. H. Bissell, Monroe Co. (Died in office.)

1860—John Wood, Adams Co. (To fill vacancy.)

1861—Richard Yates, Morgan Co.

1865—Richard J. Oglesby, Macon Co.

1869—John M. Palmer, Macoupin Co.

1873—Richard J. Oglesby, Macon Co. (Resigned.)

1873—John L. Beveridge, Cook Co. (To fill vacancy.)

1877—Shelby M. Cullom, Sangamon Co.

1881—Shelby M. Cullom, Sangamon Co. (Resigned.)

1883—John M. Hamilton, McLean Co. (To fill vacancy.)

1885—Richard J. Oglesby, Logan Co.

The present constitution was adopted in 1870 and amended 1880. Illinois has 102 counties, all under township organization except Alexander, Bond, Calhoun, Cass, Cook, Edwards, Franklin, Gallatin, Greene, Hardin, Henderson, Johnson, Massac, Menard, Monroe, Morgan, Perry, Pope, Pulaski, Randolph, Saline, Scott, Union, Wabash, Washington, Williamson.

There are State Boards of Agriculture, Health, Pharmacy and Education; Railroad and Warehouse Commissioners, Fish Commissioners, Commissioners of Public Charities, Canal Commissioners, two Boards of Prison Commissioners.

There is a State Historical Library and Natural History Museum, and a State Library.

The Illinois House of Representatives is elected under what is known as minority representation. There being three members to elect from each district, the voters may cast three votes for one candidate, one and one-half for two, or one each for three.

The State Legislature is called the General Assembly and meets biennially.

Illinois has two U. S. Senators and twenty Representatives in Congress, and twenty-two Electoral votes.

CIVIL GOVERNMENT.

There are three Branches of Civil Government—Legislative, Judicial and Executive. The Legistive Makes the Laws, the Judicial Interprets and the Executive Enforces them.

UNITED STATES.

LEGISLATIVE.

Senate—Elected by Legislatures. Two Senators from each State for six years. Salary, $5,000.

House—325 Representatives, at present. Elected by the people for two years. Salary, $5,000.

JUDICIAL.

One Supreme Court— Nine members. One Chief Justice, $10,500; eight Associate Justices, $10,000.

One Court of Claims—Five Judges, $4,500.

Nine Circuit Courts—One Judge in each circuit. Salary, $6,000.

1st Circuit.—Rhode Island, Massachusetts, New Hampshire, Maine.

2d Circuit.—Vermont, Connecticut, New York.

3d Circuit.—Pennsylvania, New Jersey, Delaware.

4th Circuit.—Maryland, Virginia, West Virginia, North Carolina, South Carolina.

5th Circuit.—Georgia, Florida, Alabama, Mississippi, Louisiana, Texas.

6th Circuit.—Ohio, Michigan, Kentucky, Tennessee.

7th Circuit.—Illinois, Indiana, Wisconsin.

8th Circuit.—Nebraska, Minnesota, Iowa, Missouri, Kansas, Arkansas, Colorado.

9th Circuit.—California, Oregon, Nevada.

Sixty District Courts.—One Judge in each District. Salary, $3,500 to $5,000.

One District each.—California, Connecticut, Delaware, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Minnesota, Nebraska, Nevada, New Hampshire, New Jersey, Oregon, Rhode Island, Vermont, West Virginia, Colorado.

Two Districts each.—Arkansas, Georgia, Florida, Illinois, Michigan, Mississippi, Missouri, North Carolina, South Carolina, Ohio, Pennsylvania, Virginia, Wisconsin, Louisiana.

Three Districts each.—Alabama, New York, Tennessee, Texas.

The Northern and Southern Districts of Illinois are divided by Hancock, McDonough, Fulton, Tazewell, McLean, Ford and Vermilion counties, which lie in the Southern District.

All the judges appointed for life by the President and confirmed by the Senate.

EXECUTIVE.

President, $50,000.

Vice-President, $8,000.

Elected by Electoral College for four years.

Cabinet.—Salary, $8,000. Secretaries of State, Treasury, War, Navy and Interior; Post-Master General, Attorney General. Appointed by the President and confirmed by the Senate.

ILLINOIS·

STATE.

LEGISLATIVE.

Senate.—Fifty-one Senators, four years.

House.—153 Representatives, 2 years.

Per diem, $5.00. Elected by the people.

Illinois sends to the General Assembly one Senator and three Representatives from each of the following Districts:

1st, 2d, 3d, 4th, 5th, 6th, 7th, 9th, 11th, 13th.—Cook county.

8th.—Boone, McHenry, Lake.

10th.—Winnebago, Ogle.

12th.—Jo Daviess, Stephenson, Carroll.

14th.—Kane, DuPage.

15th.—Will.

16th.—Kankakee, Iroquois.

17th.—DeKalb, Kendall, Grundy.

18th.—Livingston, Ford.

19th.—Whiteside, Lee.

20th.—Marshall, Woodford, Tazewell.
21st.—Rock Island, Henry.
22d.—Knox, Fulton.
23d.—LaSalle.
24th.—Henderson, Hancock, Mercer.
25th.—Bureau, Stark, Putnam.
26th.—Peoria.
27th.—Warren, McDonough.
28th.—McLean.
29th.—Logan, Macon.
30th.—DeWitt, Piatt, Champaign.
31st.—Vermilion, Edgar.
32d.—Douglas, Coles, Cumberland.
33d.—Moultrie, Shelby, Effingham.
34th.—Mason, Menard, Cass, Schuyler.
35th.—Adams.
36th.—Brown, Pike, Calhoun.
37th.—Scott, Greene, Jersey.
38th.—Morgan, Macoupin.
39th.—Sangamon.
40th.—Christian, Montgomery.
41st.—Madison.
42d.—Bond, Clinton, Washington.
43d.—Fayette, Marion, Jefferson.
44th.—Clay, Richland, Wayne.
45th.—Clark, Crawford, Jasper.
46th.—Hamilton, White, Wabash, Lawrence.
47th.—St. Clair.
48th.—Monroe, Randolph, Perry.
49th.—Saline, Gallatin, Hardin, Pope, Massac.

50th.—Jackson, Union, Alexander.

51st.—Franklin, Williamson, Johnson, Pulaski.

Illinois sends to Congress one member from each of the following Districts:

1st, 2d, 3d, 4th—Cook County.

5th.—Boone, McHenry, Lake, DeKalb, Kane.

6th.—Jo Daviess, Stephenson, Winnebago, Carroll, Ogle.

7th—Whiteside, Lee, Bureau, Putnam, Henry.

8th.—LaSalle, Kendall, DuPage, Will, Grundy.

9th.—Kankakee, Iroquois, Ford, Livingston, Woodford, Marshall.

10th.—Peoria, Stark, Knox, Fulton,

11th.—Rock Island, Mercer, Warren, Henderson, Hancock, McDonough, Schuyler.

12th.—Adams, Brown, Pike, Scott, Greene, Jersey, Calhoun.

13th.—Tazewell, Mason, Menard, Morgan, Sangamon, Christian.

14th.—Logan, McLean, DeWitt, Macon, Piatt.

15th.—Champaign, Douglas, Coles, Edgar, Vermilion.

16th.—Cumberland, Clark, Jasper, Crawford, Richland, Lawrence, Wabash, Edwards, Wayne, Clay.

17th—Moultrie, Shelby, Effingham, Fayette, Montgomery, Macoupin.

18th.—Bond, Madison, St. Clair, Monroe, Washington.

19th.—Clinton, Marion, Jefferson. Franklin, Hamilton, White, Gallatin, Saline, Hardin.

20th.—Randolph, Perry, Jackson, Williamson, Johnson, Pope, Massac. Pulaski, Alexander, Union.

JUDICIAL.

Supreme Court.—One Chief Justice, six Associate Justices, elected for nine years. Salary, $5,000.

NORTHERN GRAND DIVISION—Boone, Bureau, Carroll, Cook, DeKalb, DuPage, LaSalle, Marshall, McHenry, Mercer, Ogle, Grundy, Henderson, Henry, Iroquois, Jo Daviess, Lee, Peoria, Putnam, Rock Island, Kane, Kankakee, Kendall, Knox, Lake, Livingston, Stark, Stephenson, Warren, Whiteside, Will, Winnebago, Woodford.

CENTRAL GRAND DIVISION—Adams, Brown, Cass, Calhoun, Champaign, Christian, Clark, Coles, Cumberland, DeWitt, Douglas, Edgar, Ford, Fulton, Greene, Hancock, Jersey, Logan, Macon, Macoupin, Mason, McDonough, McLean, Menard, Montgomery, Morgan, Moultrie, Piatt, Pike, Sangamon, Schuyler, Scott, Shelby, Tazewell, Vermilion.

SOUTHERN GRAND DIVISION—Alexander, Bond, Clay, Clinton, Crawford, Edwards, Effingham, Fayette, Franklin, Gallatin, Hamilton, Hardin, Jackson, Jefferson, Jasper, Johnson, Lawrence, Madison, Marion, Massac, Monroe, Perry, Pope, Pulaski, Randolph, Richland, Saline, St. Clair, Union, Wabash, Washington, Wayne, White, Williamson.

Appellate Court.—Three Judges in each District, appointed from among the Circuit Judges by the Supreme Court for three years. Salary, $3,500.

1st District—Cook County.

2d District—Northern Grand Division of Supreme Court, except Cook county.

3d District—Central Grand Division of Supreme Court.

4th District—Southern Grand Division of Supreme Court.

Circuit Courts.—Three Judges in each Circuit, elected for six years. Salary, $3,500.

1st Circuit.—Franklin, Saline, Williamson, Jackson, Union, Johnson, Pope, Hardin, Massac, Pulaski, Alexander.

2d Circuit.—Cumberland, Effingham, Clay, Jasper, Richland, Lawrence, Crawford, Jefferson, Wayne, Edwards, Wabash, White, Hamilton, Gallatin.

3d Circuit.—Bond, Madison, St. Clair, Marion, Clinton, Washington, Randolph, Monroe, Perry.

4th Circuit.— Vermilion, Edgar, Clark, Coles, Douglas, Champaign, Piatt, Moultrie, Macon.

5th Circuit.—Sangamon, Macoupin, Christian, Montgomery, Fayette, Shelby.

6th Circuit.—Hancock, Adams, Fulton, McDonough, Schuyler, Brown, Pike.

7th Circuit.—DeWitt, Logan, Menard, Mason, Cass, Morgan, Scott, Greene, Jersey, Calhoun.

8th Circuit.—Putnam, Marshall, Woodford, Tazewell, Peoria, Stark.

9th Circuit.—Bureau, LaSalle, Will, Grundy.

10th Circuit.—Rock Island, Mercer, Henry, Henderson, Warren, Knox.

11th Circuit.—McLean, Ford, Kankakee, Iroquois, Livingston.

12th Circuit.—Boone, DeKalb, McHenry, Lake, Kane ,DuPage, Kendall.

13th Circuit.—Jo Daviess, Stephenson, Winnebago, Carroll, Whiteside, Ogle, Lee.

EXECUTIVE.

Governor. $6,000.

Lieutenant-Governor, $1,000.

Secretary of State, $3,500.

Auditor of Public Accounts, $3,500.

Superintendent of Public Instruction. $3,500.

Attorney-General, $3,500.   All elected by the people for four years.

Treasurer, $3,500.   Elected by the people for two years.

COUNTY.

LEGISLATIVE.

Under Township Organization.—Board of Supervisors elected annually from the municipal townships.

Not under Township Organization.—Board of County Commissioners of three members.   One elected annually for three years.

Cook county has a Board of fifteen Commissioners elected by the people.

JUDICIAL.

County Judge elected for four years.

EXECUTIVE.

Sheriff.

Treasurer.

Superintendent of Schools
County Clerk.
Circuit Clerk.
Coroner.
State's Attorney.
Surveyor. All for four years.

Cook and LaSalle counties have, in addition, a Recorder and Probate Judge and Clerk; McLean and St. Clair a Recorder.

TOWNSHIP.

LEGISLATIVE.

Annual meeting of the people.

JUDICIAL.

Justices of the Peace, four years.

EXECUTIVE.

Supervisor,
Town Clerk,
Assessor,
Collector,
Pound Master,   elected for one year.
Highway Commissioners,
School Trustees,   three years.
Constables, four years.
Treasurer, appointed by Trustees for two years.

School Trustees and Treasurer are school township officers.

SCHOOL DISTRICT.

LEGISLATIVE.

Three Directors, three years.   One elected annually.

JUDICIAL.

Directors.

County Superintendent.

EXECUTIVE.

Directors.

Teacher.

CITY OR VILLAGE.

LEGISLATIVE.

Mayor and Council, elected by the people for two years.

JUDICIAL.

Police Magistrate, four years.

Cities of not less than 3000 population may vote to have a city court of one to five Judges.

EXECUTIVE.

Mayor.

Clerk.

Treasurer.

Attorney.

Elected by the people, two years.

Villages have six trustees, three elected annually for two years.

UNITED STATES SURVEY OF ILLINOIS.

Soon after the Revolutionary War, before the Constitution was adopted, and when there was no President of the United States, the General Government was beset with many difficulties.

There was a war debt and no resources; the States could come to no agreement about their boundaries in the Northwest, especially because the States with no claim to western land would not consent to a Union that did not remove, in part at least, the wide difference in area.

As a means of promoting harmony and hastening the adoption of the Constitution, it was suggested that this much claimed land—the Northwest Territory—be ceded to the General Government.

It could then be disposed of to companies or settlers, and was regarded as an important prospective means of paying the war debt.

It was some years before the cessions were all complete and the deeds executed, but it was finally done, and when the transfer was made, there came into existence our public domain.

For the purpose of disposing of it, the old Congress, in 1785, adopted the rectangular system of surveys.

This system was reported from a committee of Congress, May 7, 1784, of which Thomas Jefferson was chairman.

It is based upon lines known as Principal Meridian and Base Line, the geographical meridian being substituted for the magnetic meridian.

A principal meridian is a true north and south line, and has no reference to anything only the survey, being principal in that. It will be a meridian of the earth, because it would, if extended, pass through the poles.

It is run wherever it is deemed necessary or convenient for the district or tract to be surveyed, and usually has reference to some natural land mark, such as the confluence of rivers, the better to secure accuracy.

Distance east or west of the principal meridian is known as Range 1, 2, 3, etc., east; or, Range 1, 2, 3, etc., west of the principal meridian, somewhat as degrees of longitude, east or west of a first meridian.

Each principal meridian has a true east and west line crossing it at right angles, called a base line, and distance north and south of it is something like degrees of latitude north or south of the equator.

The base line may be located at either extremity of the principal meridian, or at any point between them. If it is at the extreme northern limit, then there will, of course, be no townships north, but all townships south; or, if at the other extremity, then all townships will be north and none south; if at

any place between the two, there will be townships both north and south. So, too, there will be ranges of townships east or west or both, according as the principal meridian crosses the base line at one extremity or between the two.

The country is surveyed or laid off in every direction, eventually, into tracts six miles square called townships, containing thirty-six square miles, each one of which is intended to contain 640 acres.

Townships are numbered consecutively, beginning at the base line north or south; and ranges of townships, east or west, beginning at the meridian.

The *number* of a township, as given at the east or west margin of the county map, indicates its distance from the base line; and the *range* number as found at the north or south margin, shows its distance from the meridian. Multiply these numbers by six to get the distances in miles.

The thirty-six square miles of a township are called sections and are numbered alternately west and east, beginning at the northeast corner with No. 1, and ending at the southeast corner with No. 36, as shown on the county map.

A section is divided into east and west halves by a north and south line; into north and south halves by an east and west line; and into quarters by both. Quarter sections are sub-divided in a similar manner. The half-mile posts for sub-dividing the sections are placed in the original survey but the lines are not actually run.

The United States Government has full charge of the public land, orders and pays for surveys, has the care of the original records or archives, closes the office of Surveyor-General when the survey is completed, disposes of the land, and then delivers the archives to the State authorities.

While Illinois was originally a part of the Northwest Territory and so included in the general plan of survey, little was actually done within its present limits till about the time Indiana was admitted into the Union.

In 1816 a Surveyor-General was appointed for the territories of Illinois and Missouri, the latter being a part of the Louisiana purchase. His office was at St. Louis and was closed in 1863.

The Illinois records were delivered to the State in 1869.

The Surveyors-General enter into contracts with professional surveyors whom they commission as their deputies.

Surveying contracts describe the particular field work to be executed, the time within which it must be completed, the consideration at so much per lineal mile, expenses of the surveyor, his party and instruments, together with proper returns to the office of the surveyor-general.

The deputy surveyor has usually six men to assist him. Before they enter upon their duties they are sworn to perform the work faithfully and according to the manual of instructions issued by the government.

The survey has never been extended until the Indian title has been extinguished, and it must be remembered, that while the government was anxious to dispose of the land, there was no utility in a survey until there was a prospect of settlement and consequent demand for the land.

During the early working of the system, it was, under Congress, in the hands of the Board of Treasury, the then Treasury Department.

By 1812, the public domain had grown to such vast dimensions, that Congress created the office of Commissioner of the General Land Office, and made his bureau subordinate to the Treasury Department.

In 1849, when Congress created the Home (now Interior) Department, it was made the duty of the Secretary to supervise the Land Office, the present arrangement.

The lines of public survey over level ground are measured with a four-pole chain, 66 feet in length, eighty chains constituting one lineal mile, but with a two-pole chain where the country is broken or hilly.

The lines thus chained or measured are marked by chops on each side of line trees, and in the absence of such trees those standing nearest the line are blazed diagonally toward it.

Trees standing on the precise spot where legal corners are required are made available. If no such trees are there, then the corners are perpetuated by posts or stones.

Township corner posts or stones, common to four townships, are set diagonally and marked with six

notches on each of the four angles, set to the cardinal points of the compass.

Mile posts on township lines are marked with as many notches as they are distant from the township corners respectively.

The principal meridian and the base line are first measured and marked (not always throughout the whole length) and the corner boundaries thereon established, then follows running of the exterior lines of townships. The interior lines of the townships may then be surveyed.

After this, the meridian and base line may be extended, if necessary, for other ranges and townships.

This is the usual order to be followed.

Since its adoption, the system has been improved by the addition of standard parallel or correction lines, and guide meridians.

The latter are north and south lines run every eight ranges of townships, or 48 miles, from the principal meridian, and contribute to the accuracy of the survey.

Correction lines are east and west lines, north or south of the base line, run independently, beginning at the meridian.

As meridians converge toward the poles, any two lines run due north will eventually meet.

It follows that the space between them gradually grows narrower. To compensate this, the correction lines are established at intervals of a few townships from the base line.

All north and south lines of surveys are run toward the north.

Township lines are run from the base line to the first correction line north. Then beginning anew at the township corners previously set on this first correction, run to the second correction line north, then from the second to the third correction line; and so on throughout the tract north of the base line.

On the county map the "jogs" may be seen at these correction lines.

South of the base line the following order is observed.

Beginning at the township corners on the first correction line south, run north to the base line, then begin at the second correction line south and run to the first, and so on.

The surveys in Illinois are governed by three principal meridians, two of which are within the State and one entirely out of it.

These three surveys are shown by the coloring of the Illinois map. That portion of the State surveyed from the 2nd P. M. being pink, the 3rd blue, and the 4th yellow.

While Illinois was part of the Indiana Territory, the survey was extended westward from the 2nd P. M. across the present eastern boundary of Illinois, and so a portion of that survey is in Illinois while the 2nd P. M. itself is in Indiana.

Lands belonging to individuals when the country came into the hands of the United States, are not

included in the public survey, and the government has at times excepted certain other specified portions.

There are many such tracts opposite Vincennes and around Kaskaskia.

The greater part of Illinois is governed by the 3rd principal meridian, which is a line due north from the mouth of the Ohio river and coincides with longitude 89° 10' 30'' west from Greenwich.

Its base line, which is a continuation of the base line of the 2nd principal meridian, crosses the State one mile south of Belleville and three miles north of Mt. Carmel, forming the boundary line between Jefferson and Marion counties in latitude 38° 30' north.

The 4th principal meridian in longitude 90° 29' 56'' west is due north from the mouth of the Illinois river through Galena, to the State line, having no reference, however, to Iowa, which it would seem to cross.

Its base line crosses Adams county five miles north of Quincy, and meets the meridian opposite Beardstown.

The 2nd principal meridian runs due north from the mouth of the Little Blue river in Indiana. This State was surveyed long before Illinois, the land sold and the archives turned over to the State authorities in 1849—twenty years before the Illinois survey was finished.

The 2nd principal meridian controls in Illinois to the west line of R. 14 W., the State line being in

R. 10 W. of the 2nd principal meridian, and from T. 5 S. to T. 30 N.

The line of demarcation of the 2nd and 3rd principal meridians has no name or designation, and descriptions of adjoining tracts of land in that locality may refer to different meridians, even in the same county.

The 3rd principal meridian governs east to the State line, north of the Indiana survey, fourteen and a fraction ranges east. At the meeting of the two surveys it is ten and a fraction ranges east of the 3rd.

West it governs to the Mississippi and Illinois rivers, the greatest extent being in Scott county, thirteen and a fraction ranges west.

North of the Illinois river, the 3rd principal meridian governs no surveys west, as that belongs east of the 4th principal meridian.

The 3rd principal meridian has forty-six townships north and seventeen south.

The 4th principal meridian governs the surveys west of the Illinois river and west of the 3rd principal meridian north of the river.

It has thirteen townships south, in Calhoun county, at the bend of the river, and twenty-nine townships north.

Its greatest extent west is range ten, in Adams county; east, range eleven, reaching to the 3rd principal meridian.

Up to 1880, the public surveys had been closed in the following States only: Alabama, Arkansas, Illinois, Missouri, Iowa, Wisconsin, Kansas, Mississippi, Ohio, Indiana and Michigan.

A section may be divided into east and west halves, north and south halves, or into four quarters; and the quarter section may be subdivided in the same manner, making forty possible land descriptions referable to any section. See diagram on the county map.

The cost of surveying has ranged from $3 to $30 per lineal mile at various times.

For State or Territorial boundary surveys, or others astronomically determined, as high as $75 per lineal mile has been paid.

A township of land contains twelve miles of exterior lines and sixty miles of section lines. The prices allowed by existing laws are $12 for meridian and correction lines, $10 for exterior township lines, and $8 for section lines.

A surveyed township of thirty-six square miles is called a congressional or government township, because it is created by authority of Congress; a sectional township, because it is composed of sections; and a school township by enactment of the State Legislature.

Civil or municipal townships are created for the pur poses of local government, and have specific names. They are also called political townships, and may or may not coincide with congressional townships. See the county map.

The east line of Illinois was run in 1821 by two commissioners, one from each State.

The first surveying in Illinois was probably done in 1805.

In tax lists and receipts, school officers' reports, teachers' schedules, deeds, locations and land descriptions generally, such expressions as T. 5 N. (or S.), R. 7 E. (or W.) are usually read town 5 north (or south), range 7 east (or west) instead of township 5 north (or south) of the base line, range 7 east (or west) of the 3rd (or other) principal meridian.

HISTORICAL NOTES.

The names of Illinois counties and towns are full of historical interest, and will lead directly or by association to the great men and stirring events of the past.

The patriotic deeds and eloquent words of our forefathers may thus be brought to help us to appreciate our privileges and the duties we owe.

Two of the counties suggest the name of him of whom it was said ''he touched the dead corpse of public credit and it sprang upon its feet,'' Alexander and Hamilton.

These county names will recall Presidents: Washington, Adams, Jefferson, Madison and Monroe —and Quincy, Adams (county) is particularly appropriate. There ought to be a Marquette county as well as a LaSalle, with Hennepin or Joliet its county seat.

Washington county ought to have Mt. Vernon for

its capital in memory of Washington's home, and Jefferson county might ask Piatt for Monticello out of regard for the "Sage."

Sullivan, in Moultrie county, is suitable, for Col. Moultrie commanded the fort on Sullivan's Island. It was in the attack on this fort that Sergeant Jasper immortalized himself—and we have a Jasper county.

Of the Revolutionary generals represented are Greene, who died of sunstroke, "Mad Anthony" Wayne, and Schuyler, whose daughter was the wife of Alexander Hamilton.

Pinckneyville suggests Charles C. Pinckney, who said "Millions for defense but not one cent for tribute."

Montgomery reminds us of 1775 at Quebec, and of Gen. Wolfe, who would rather have written Gray's "Elegy" than capture that city.

Pulaski brings to mind the Polish count who was killed at Savannah in 1779, and other distinguished foreigners of Revolutionary fame; LaFayette (Fayette county) who laid the corner stone of Pulaski's monument; Rochambeau, who lent to Robert Morris (Grundy county) the money that transported Washington's army to Yorktown; Kosciusko, who was with Gates at Stillwater and who has a monument at West Point erected by the cadets; and Baron DeKalb, for whom one of our counties was named.

When mortally wounded at Camden, DeKalb said "I die the death I have always prayed for—the death

of a soldier fighting for the rights of man." At his grave Washington exclaimed, "So here lies the brave DeKalb, the generous stranger who came from a distant land to fight our battles and water with his blood the tree of liberty."

Clay, Calhoun, Cass and Scott counties suggest unsuccessful presidential candidates. Clay, the "Great Pacificator" and "Mill Boy of the Slashes," "Would rather be right than president." Of Calhoun, Webster said " 'Nothing meanly selfish came near his head or heart."

Calhoun and Webster were born the same year. Clay and Webster died the same year.

Cass was Secretary of State under Buchanan, and Scott had chief command of our armies in the Mexican war.

Marshall gives us the name of the U. S. Chief Justice who established "on a firm and enduring basis the noble structure of American law," and Hancock, one of the signers of the Declaration of Independence.

The early governor of New York, who originated the Erie canal, founded a school of art and an orphans asylum, is named in full—DeWitt, Clinton

The county seat of Franklin is Benton; if it were Benjamin it would complete the reference to "Poor Richard" for whom Paul Jones' vessel, the *Bon Homme Richard* was named.

Jackson recalls the hero of New Orleans, "Old Hickory," and ought to have a "Hermitage."

Grundy has the name of a United States Attorney-General and its county seat that of the Revolutionary financier, Robert Morris, whose adopted son was President Harrison, and Gouverneur Morris, of Pennsylvania, who wrote the Constitution

From Livingston we may go to the purchase of Louisiana, as we find among the signers of the treaty Robert R. Livingston, who said at that time, "We have lived long but this is the noblest work of our whole lives."

Fulton county is appropriately located between the rivers, as Robert Fulton was the first steamboat captain; and the county seat, Lewistown, helps us to remember Lewis and Clarke's expedition to the Pacific ocean. This Clarke was a brother of Col. George Rogers Clarke who captured Kaskaskia—and we have a Clark county.

Generals Pike and Winchester were together at Plattsburg in 1812, and in 1813 Pike lost his life at the moment of victory by the explosion of a magazine.

Morgan was in the battles of the Cowpens, Quebec and Bemis Heights.

Gen. Jacob Brown, at his death in 1828, was in supreme command of the United States army.

Marion was born in the same year as Washington, and was noted for his success as a general.

Monmouth could appropriately build a monument to "Major Molly," for it was in that battle Molly Pitcher took her fallen husband's place at the cannon. In the battle of Bunker Hill, Generals Warren and Putnam

enlisted as privates; Warren fell, and Mrs. Adams wrote "We mourn for the citizen, the physician, the senator, the warrior." Israel Putnam died after the Revolution was over. "Give me liberty or give me death" is suggested by Henry county, and if we read of Patrick Henry in connection with Col. George Rogers Clarke, we may realize how much Illinois owes him.

Stark brings to mind the battle at Bennington, and its watchword; the county seat of Bureau, Princeton, in which battle Mercer fell.

Peyton Randolph, the president of the first continental congress, and John Randolph, who was a descendant of Pocahontas, are suggested by Randolph county.

Bond, Ford, Coles and Edwards recall the early governors of Illinois; St. Clair suggests the first governor of the Northwest Territory; Boone, the Kentucky pioneer; Douglas, the "Little Giant," who held the hat of his successful rival on inauguration day; Lawrence, "Don't give up the ship;" and Perry, "We have met the enemy and they are ours." From Macon's county seat we may think of the Commodore's toast, "Our country! In her intercourse with foreign nations, may she always be in the right, but our country, right or wrong."

McHenry might suggest Key and "The Star Spangled Banner;" and Cambridge, of Henderson county, our first great colleges and universities.

Harvard University was founded in 1638; William and Mary College in 1693; Yale College in 1700;

Brown University in 1764; Dartmouth College in 1769; and Bowdoin College in 1794.

And these naturally lead us to consider American Literature, Authors and Educational Institutions.

Of the Indian names that have survived are Iroquois, Winnebago, Pontiac, Shawneetown, Kishwaukee, Ottawa, Fox and Peoria.

Taylorville recalls "Old Rough and Ready." Pierre Menard was the first Lieutenant-Governor of Illinois, and the president of all its territorial legislatures. Albert Gallatin, whose name is found in a southern county, had probably more to do with directing the United States Survey in Illinois than any other man.

"By these events was the northwestern boundary of the new American Union removed from the Ohio to the Great Lakes, and except for George Rogers Clarke and his victories, the northwest might be to-day a British Canadian colony."

EXERCISES ON THE STATE MAP.

The following is only suggestive of ways in which the maps may be used. The first object should be thoroughly to master the geography of your State and county. Let the lessons be short, frequent and never wearisome. A free use of the pointer on the part of the pupils themselves, as well as the teacher, is essential.

The first lesson might be to bound the State, then point out boundary rivers, interior rivers and the canal. In learning the cities or towns, begin with those nearest home, noting their direction, their industries or institutions and their township and range as shown in the Key. Relate any incidents or facts of special interest connected with them.

Use the Historical Notes and any current literature to supplement the work.

Let the pupils learn to enumerate in a table the important things about towns, etc.

Learn, especially, to bound your own county.

Name the largest county, the smallest, the county with the greatest number of bounding counties.

Name the creek or river county boundaries.

Tell whether a county is in the northern, southern or central portion. Name the counties that are bounded by a principal meridian or a base line and those through which they pass.

Name the counties along the Mississippi, the Illinois, the Ohio and Wabash. Along Lake Michigan, those that touch Wisconsin and Indiana, and those liable to be overflowed.

Give the counties that lie within the 2nd principal meridian survey. Notice that Galena, in the extreme north, and Mound City, in the extreme south, are the only cities that are on a principal meridian—one on the 4th and one on the 3rd. That Kankakee city stands in two surveys and in two townships.

Notice the odd form of Pope, Calhoun and Mason counties, and the steps on the boundaries of Shelby, Scott, Will and McLean.

Let the pupils write upon their slates the T. and R. of two given cities in the same survey and find the distance between them.

The 3rd principal meridian has 46 T. north and 17 T. south, making 63 X 6 miles, or 378 miles as the approximate length of the State.

Point out on the map where the coal fields are; where lead, zinc, copper and salt are found.

From the civil government (pp 9 and 11) take the list of counties composing your senatorial and congressional districts, learn them and who represents them at Springfield and Washington. Learn, also, what counties compose your United States and State circuit courts and to what U. S. district court your county belongs.

Have the pupils write upon paper the names of all the counties in the State, beginning with Jo Daviess as in the key.

Forming this list will furnish a variety of exercises, among which may be named spelling, pronunciation, history and geography. About ten counties will be sufficient for one lesson.

When the pupils have the whole list written make a general exercise of arranging the names alphabetically.

EXERCISES ON THE COUNTY MAP.

In studying the wall map of the county, point out the county seat, and its direction from your school house.

Find the number of miles by the sections to that and other towns. Take imaginary journeys all over the county by rail—changing cars wherever necessary and visiting places of interest.

Name and locate all the municipal and congressional townships, and give the difference between them.

Notice where the two kinds of townships have and have not the same boundary.

Compare the areas of the municipal townships—the largest, the smallest. Name and locate the towns, streams, etc. Let the pupils tell where to find the different kinds of trees and soils in the county. Locate the big farms and bridges.

Learn something of the hilly and level portions. Study the exports and imports of the county.

Give population and area and any historical facts connected with the county.

Proceed in a similar manner with your township and district maps.

EXERCISES ON THE UNITED STATES SURVEY.

The importance of teaching this subject can scarcely be over estimated. All who own any tract, however small, are directly interested, and any person may own land in this country. Hence no one should leave the public schools unacquainted with the system. For instance, all should know that there is a mistake or something wrong about land offered for sale in T. 50 N., R. 25 E. of the 3d principal meridian, there being no such location, and that it might be well, before buying, to examine any tract whose description locates it where there is likely to be swamp or overflowed land. Such exercises as the following on the State and county outline maps, which this volume accompanies, will give such a comprehensive knowledge of the subject, that there need never be any difficulty in detecting false or defective land descriptions in titles, etc.

Have the pupils draw a congressional township, and number the sections beginning at the northeast corner and repeating the section numbers in every possible order, the north tier, the west, the south, the east tier. Then diagonally 1, 11, 15, 21, 29, 31, or 6, 8, 16, 22, 26, 36, etc.

Give the sections that bound a sectional township, those that corner at the northeast, northwest, southeast and southwest. What four sections constitute the center of the township?

Erase the west half of the township, now give the west tier, the middle tier, the east.

Treat the west half of the township in the same way, the north and the south.

Section 16 would be in a north or a west half of the township—where would section No. 26 be? Name other sections rapidly for location. When pupils are familiar with the order of the numbers, put upon the board a large rectangle of sections, not a copy of any map, nor necessarily a multiple of 36, but a field of un-numbered sections, for practice in numbering the sections of townships.

Then beginning with No. 1, at the northeast corner of course, let the teacher or a pupil write the numbers as the class shall dictate, clear across the entire north tier, then go back on the second tier clear to the east, and so on progressively as a single township is numbered. There cannot be more than six consecutive numbers in these tiers. Now divide it by heavy lines into townships and compare with the county map to test the numbering.

In all problems on the survey, make a diagram according to the conditions given, for in no other way can the locations and descriptions be so readily grasped.

These exercises may be extended at will. Name any section or sub-division, ask how much wheat at a given number of bushels per acre, sell the wheat, fence the tract, plant apple trees in it or ditch it.

Call for written descriptions of specified tracts. Have pupils point out on the map from oral or written descriptions any section in the county.

Make a diagram showing the E. $\frac{1}{2}$ and W. $\frac{1}{2}$ of a section, the S. $\frac{1}{2}$ and N. $\frac{1}{2}$, the N. E. $\frac{1}{4}$, the N. W. $\frac{1}{4}$, the S. W. $\frac{1}{4}$ and the S. E. $\frac{1}{4}$; the E., W., N. or S. $\frac{1}{2}$ of any $\frac{1}{4}$; the N. E., N. W., S. E. or S. W. $\frac{1}{4}$ of any $\frac{1}{4}$.

Let a new diagram be made each time and the fractional name properly written.

How many acres in each of the foregoing tracts? See subdivision of a section on the county wall map.

Referring to a full township of 36 sections, explain how squaring a side produces the area of a square. Referring to a range of townships show how multiplying the length by the breadth gives the area of a rectangle.

Looking at a section on the county map point out that there is no difference between one square mile and one mile square; at the township, and show that there is a difference between six square miles and six miles square.

Using four sections, show that the square described on twice a line is four times the square on the given line; and that the square on one-half a line is one-fourth of the square on the given line.

Draw the diagonal of a township or of two, and find its approximate length; the area in acres of one of the triangles.

Find the number of acres in a township.

Find the number of miles between two given places, from the sections.

Use the State map to study thoroughly the different portions of the State controlled by the three principal meridians.

Learn their greatest extent in different directions as given on pp 24 and 25.

Construct every variety of problem to fix these extreme T. and R. numbers in the memory. In such problems it is only necessary to remember that six is the scale for the reduction.

The 3d principal meridian has 46 T. N. and 17 T. S.; how long is it? There are about 14⅓ R east of the 3rd principal meridian to Indiana; 11 R. east of the 4th to the 3rd, and 10 R. west of the 4th principal meridian to the Mississippi. How wide is the State?

How far is it from Beardstown to Cairo —from T. 18 N. to T. 17 S.?

The location of every county seat is given in the Key —with this aid judge what townships and ranges must be in any given county. Work in the T. and R. of counties at a distance may be only an oral drill, without any previous preparation, simply to familiarize pupils with the actual survey as it is spread upon the State. As the scale of the map is 7 1-7 miles to one inch a township or six miles in distance will be a little less than ⅞ of an inch as shown on the T. and R. measure

All county boundaries do not coincide with township lines, but many of them do, and along a meridian or base line we have an unchangeable starting point.

The first six miles east or west of a principal meridian forms R. 1 E. or R. 1. W. as the case may be. The first six miles north or south of a base line forms T. 1 N. or T. 1 S. as may be, and so on, every six miles forming another R. or T.

Measure on the State map to find locations; measure from the 3d principal meridian east and see that Chicago, for instance, is in R. 13 and 14 E., or measure from the base line south and find that Cairo is in T. 17 S.

Using the measure, find how many T. and R. any given county has. Find what ones it has by measuring from the meridian or base line. For instance, Knox county must have R. 1, 2, 3 and 4 east of the 4th, and Stark must begin with R. 5 E.

Point out irregularities of county boundaries, such as LaSalle's strip of two townships between Livingston and Marshall, and measure to see where they do and do not coincide with township lines. That Pope, Saline, Hamilton, Wayne and Clay counties will all have the same R. east of the 3d principal meridian along their west line—measure to find what one it is— the location of county seats as given in the key will be of use in such comparisons.

Notice the two distances there may be east of the 3d principal meridian occasioned by the survey from the 2d principal meridian extending into Illinois.

How far from the State line or the Mississippi is a man who lives in any given T. and R., or how far from the base line or meridian.

Imagine a friend at a distance, 36, 60 or 90 miles north, south, east or west, ask the pupil what county it is in, and how the heading of the school schedule would read.
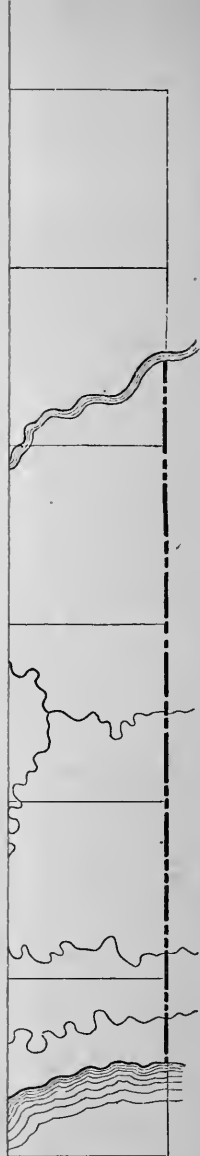
MAP DRAWING.

Get a beveled ruler marked with quarter inches, detail or manilla paper, a couple of No. 2 or 3 camels hair brushes, and anything suitable for coloring.

The paper will be 10 cents a yard and is a yard wide; the brushes will be about 5 cents and the ruler 30 to 50 cents.

## DIRECTIONS FOR DRAWING OUTLINE MAP OF ILLINOIS.

Construct a figure that shall be six spaces in width by ten spaces in length, allowing proper margin especially at the bottom where the map is extended beyond the tenth space.

The dimensions of the map may be varied by altering the size of the spaces—half inch spaces making a map 3x5 inches for small slates, or inch spaces making 6x10 map.

A good size for blackboard copy is three inch spaces making the map 18x30 inches.

Draw each part of the map in or on its proper space as if it stood alone, observing the proportions as in the accompanying diagram.

The larger the map the more windings will be shown in the river lines. Trace the construction figure lightly and erase it when the map is finished.
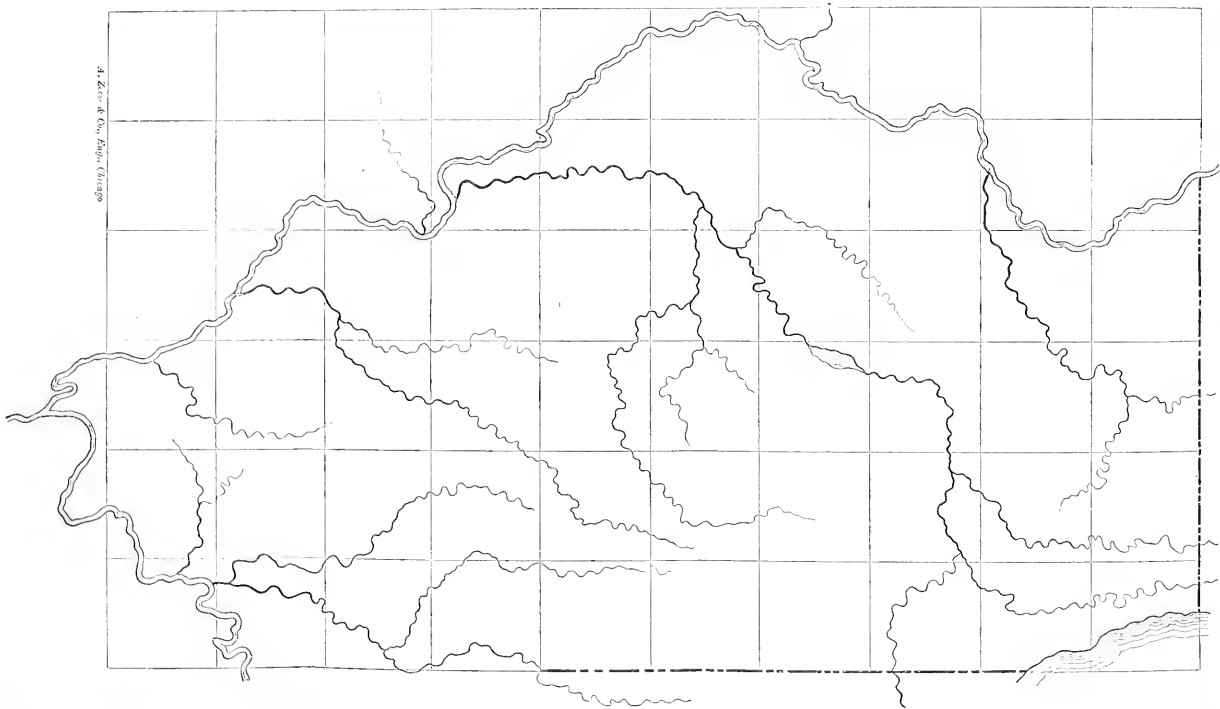
DIRECTIONS FOR DRAWING THE COUNTY MAP.

The county map must have as many spaces as there are square miles—each space representing a section.

Decide upon the scale of the map or size of the sections; quarter inch spaces will be suitable for paper or slates; for the blackboard an inch is better.

Allow a margin, remembering that the map will cover as many inches as one-fourth of the number of sections if the scale is a quarter inch to the mile or as many as one-half the number of sections if half an inch.

Work out in your mind clearly where you will begin and how to proceed. Constant reference to the wall map of the county, especially at first, and until you have mastered its details will be necessary.

If the county is regular in form, count the number of sections along two of its boundaries from the map before you; at a glance you will see the whole number of sections required by the rule for square measure—multiply the length by the breadth.

Having drawn the proper rectangle mark off the boundary lines into the proper number of spaces, using your ruler and placing the dots carefully. Lines connecting the marks will divide the whole county into sections.

Now number the sections beginning at the north-east corner of a full township; if the township is fractional special care should be exercised, and it will be helpful

to note that sections 1, 12, 13, 24, 25 and 36 form the east tier of a township; 6, 7, 18, 19, 30 and 31 form the west tier; 1, 2, 3, 4, 5 and 6 the north, and 31, 32, 33, 34, 35 and 36 form the south tier. Use ink for the numbers and make them small.

Next indicate the municipal township boundaries with crosses or heavy dashes in colors or ink, but do not make any part of the map so prominent as to obscure the other details.

Now draw the streams in the proper sections just as you draw the State map upon its spaces.

Then locate the towns and railroad lines, put the township and range numbers on the margin and write the key numbers.

At first draw the section lines with a pencil, then go over them in ink, placing the ruler with the beveled side down and toward the line to be drawn, about the width of the penholder from it. In this position the ruler will guide the pen and prevent blotting the paper. After some practice these lines can be drawn at once in ink.

Trace the river lines in pencil, then use ink with the brush.

If the county is irregular, draw the largest rectangle contained in it as if it were a regular county, and then add the other full townships and finally the fractional townships. If the county has a river or creek boundary produce all the sections necessary to include the river, and after penciling the stream erase the lines outside.

To draw the school township for the blackboard make a square 24 inches on a side and mark the bound-

aries every four inches; now connect the points of division forming the 36 sections.

Then, referring to the wall map of the county before you, locate the towns in the proper part of the proper sections, and draw the creeks and railroad lines, using the sections to guide you as in drawing the State map with the squares.

If you are in a fractional township, find from the county map the number and position of the sections and fractional sections it contains, and construct the map accordingly.

To make a map of your district, go to your township treasurer with your township and two or three additional tiers of sections around it, already drawn on a small scale, and copy the boundaries of the districts from the official map and get the location of the school houses. Then for the blackboard enlarge the district by making the sections four inches and fill in what you find on the county map.

Find the location of roads, churches, dwellings, etc., and put them into your district map.

If your civil township does not coincide with the school township, copy its boundaries from the wall map of the county, enlarge it two to four times and divide it up into sections and parts of sections as it is in the county map. Then proceed as in drawing the school township.

The size of any of these maps can be varied but it will be most convenient to take the scales as indicated above.

Place the proper name or numbering over your township or district map.

Let the teacher explain that the scales of maps do not indicate the size of the territory mapped, and that, usually, the smaller the territory the larger the scale.

KEY TO COUNTY OUTLINE MAP

OF ILLINOIS.

————

County seats, except that of Sangamon, are represented by a square figure on the map and in this list each, printed in italics, immediately follows the county name. The population of the counties is given in the column at the left.

Numbers are given to the counties and to cities or towns of importance which are not county seats.

Cities having 10,000 population are represented by an open figure, less than 10,000 by a closed square or a dot.

Places of special historical interest and the lines of railroad are colored green.

Scale of the State map 7 1-7 miles to one inch; of the county map 1 mile to one inch.

The T. and R. of all the towns is given and the industries of some of them, as well as the State Institutions

Pop. 1880.	Key No.	
27,584	1	JoDaviess, *Galena*, T. 28 N., R. 1 E. and R. 1 W. of the 4th principal meridian; lead mines, pork packing.
31,970	2	Stephenson, *Freeport*, T. 27 N., R. 8 E. of the 4th P. M.

30,518	3	Winnebago, *Rockford*, T. 44 N., R. 1 E. of the 3rd P. M.; reapers, paper, watch factory.
31,527	4	Boone, *Belvidere*, T. 44 N., R. 3 E. of 3rd P. M.
24,914	5	McHenry, *Woodstock*, T. 44 N., R. 7 E. of 3rd P. M.
21,299	6	Lake, *Waukegan*, T. 45 N., R. 12 E. of 3rd P. M.
607,719	7	Cook, *Chicago*, T. 38, 39 and 40 N., R. 13 and 14 E. of 3rd P. M.; termination of Illinois and Michigan Canal and of many railroad lines; pork packing, printing, manufacture of steel, iron, iron wares, liquor, furniture, leather, agricultural implements, wagons and carriages; largest grain market in the world; State eye and ear infirmary; site of Fort Dearborn, built by United States Government in 1803.
19,187	8	DuPage, *Wheaton*, T. 39 N., R. 10 E. of 3rd P. M.
44,956	9	Kane, *Geneva*, T. 39 N., R. 8 E. of 3rd P. M.
	10	Elgin, T. 41 N., R. 8 E. of 3rd P. M.; watch factory, dairy products, northern insane asylum.
	11	Aurora, T. 38 N., R. 8 E. of 3rd P. M.; car shops of C. B. & Q. R. R., cotton factory.
26,774	12	DeKalb, *Sycamore*, T. 41 N., R. 5 E. of 3rd P. M.

29, 946	13	Ogle, *Oregon*, T. 23 N., R. 10 E. of 4th P. M.
27, 494	14	Lee, *Dixon*, T. 21 and 22 N., R. 9 E. of 4th P. M.; plow, harrow and bagging factories, flour.
16, 985	15	Carroll, *Mt. Carroll*, T. 24 N., R. 4 and 5 E. of 4th P. M.
30, 888	16	Whiteside, *Morrison*, T. 21 N., R 5 E. of 4th P. M.
38, 314	17	Rock Island, *Rock Island*, T. 17 and 18 N., R. 2 W. of 4th P. M.; glass works, saw mills, United States Arsenal.
	18	Moline, T. 18 N., R. 1 W. of 4th P. M.; plow factory.
19, 501	19	Mercer, *Aledo,* T. 14 N., R. 3 W. of 4th P. M.
36, 609	20	Henry, *Cambridge*, T. 15 N., R. 3 E. of 4th P. M.
33, 189	21	Bureau, *Princeton*, T. 16 N., R. 9 E. of 4th P. M.
5, 555	22	Putnam, *Hennepin*, T 32 N., R. 2 W. of 3rd P. M.
70, 420	23	LaSalle, *Ottawa*, T. 33 N , R. 3 E. of 3rd P. M.; starch, largest grain market in the State outside of Chicago.
	24	LaSalle, T. 33 N., R. 1 E. of 3rd P. M.; zinc factory, glass works, coal mines.
	25	Site of Fort St. Louis, built by LaSalle in 1682.

13,084   26   Kendall, *Yorkville*, T. 37 N., R. 7 E. of 3rd P. M.

16,738   27   Grundy, *Morris*, T. 33 N., R. 7 E. of 3rd P. M.

53,424   28   Will, *Joliet*, T. 35 N., R. 10 E. of 3rd P. M.; stone quarries, iron works, State penitentiary.

24,961   29   Kankakee, *Kankakee*, T. 31 N., R. 12 E. of 3rd P. M., and T. 30 N., R. 13 W. of 2nd P. M.; stone quarries, insane asylum.

38,450   30   Livingston, *Pontiac*, T. 28 N., R. 5 E. of 3rd P. M.; State reform school.

21,630   31   Woodford, *Metamora*, T. 27 N., R. 2 W. of 3rd P. M.

15,036   32   Marshall, *Lacon*, T. 30 N., R. 3 W. of 3rd P. M.

11,209   33   Stark, *Toulon*, T. 13 N., R. 6 E. of 4th P. M.

55,419   34   Peoria, *Peoria*, T. 8 N., R. 8 E. of 4th P. M.; distilleries, lumber, pork packing, center for nine railroad lines.

38,360   35   Knox, *Galesburg*, T. 11 N., R. 1 E of 4th P. M.

22,940   37   Warren, *Monmouth*, T. 11 N., R. 2 W. of 4th P. M.

10,755   38   Henderson, *Oquawka*, T. 11 N., R. 5 W. of 4th P. M.

35,352   39   Hancock, *Carthage*, T 5 N., R. 6 W. of 4th P. M.

        40   Nauvoo, T. 6 and 7 N., R. 9 W. of 4th P. M.; Mormon settlement from 1839 to 1846.

27, 984	41	McDonough, *Macomb*, T. 5 and 6 N., R. 2 and 3 W. of 4th P. M.
41, 249	42	Fulton, *Lewistown*, T. 5 N., R 3 E. of 4th P. M.
29, 679	43	Tazewell, *Pekin*, T. 24 and 25 N., R. 5 W. of 3rd P. M.
	44	Site of Fort Creve-coeur built by LaSalle in 1680.
60, 115	45	McLean, *Bloomington*, T 23 and 24 N., R. 2 E. of 3rd P. M.; car shops of C. & A. R. R., trees and nursery stock, State Normal University and Illinois Soldiers' Orphans' Home at Normal, two miles north.
15, 105	46	Ford, *Paxton*, T. 23 N., R. 10 E. of 3rd P. M.
35, 457	47	Iroquois, *Watseka*, T. 27 N., R. 12 W. of 2nd P. M.
41, 600	48	Vermilion, *Danville*, T. 19 N., R. 11 W. of 2nd P. M ; coal mines.
40, 869	49	Champaign, *Urbana*, T. 19 N., R. 9 E. of 3rd P. M.; University of Illinois.
	50	Champaign, T. 19 N., R. 8 E. of 3rd P. M.
15, 583	51	Piatt, *Monticello*, T. 18 N., R. 5 and 6 E. of 3rd P. M.
17, 014	52	De Witt, *Clinton*, T. 20 N., R. 2 E. of 3rd P. M.
25, 041	53	Logan, *Lincoln*, T. 20 N., R. 2 and 3 W. of 3rd P. M.; State Asylum for Feeble Minded.
13, 028	54	Menard, *Petersburg*, T. 18 N., R. 7 W. of 3rd P. M.

16,244   55   Mason, *Havana*, T. 21 and 22 N., R. 8 and 9 W. of 3rd P. M.

14,494   56   Cass, *Virginia*, T. 17 N., R. 10 W. of 3rd P. M.

         57   Beardstown. T. 18 N., R. 12 W. of 3rd P. M.; opposite the initial point of the 4th P M.

16,249   58   Schuyler, *Rushville*, T. 2 N., R. 1 and 2 W. of 4th P. M.

13,044   59   Brown, *Mt. Sterling*, T. 1 S., R. 3 W. of 4th P. M.

59,148   60   Adams, *Quincy*, T. 1 and 2 S., R. 9 W. of 4th P. M.; carriages, wagons, plows, furniture, tobacco, pork packing, flour, brick, stoves and iron castings.

33,761   61   Pike, *Pittsfield*, T. 5 S., R. 4 W. of 4th P.M.

10,745   62   Scott, *Winchester*, T. 14 N., R. 12 W. of 3rd P. M.

31,519   63   Morgan, *Jacksonville*, T. 15 N., R. 10 W. of 3rd P. M.; State Asylums for Blind, Deaf and Dumb, and Insane.

52,902   64   Sangamon, *Springfield*, T. 16 N., R. 5 W. of 3rd P. M.; State Capital, watch factory, woolen mill, coal mines, iron works.

28,232   65   Christian, *Taylorville*, T. 13 N., R. 2 W. of 3rd P. M.

30,671   66   Macon, *Decatur*, T. 16 N., R. 2 E. of 3rd P. M.; railroad center.

13,705   97   Moultrie, *Sullivan*, T. 13 N., R. 5 E. of 3rd P. M.

15,857   68   Douglas, *Tuscola*, T. 16 N., R. 8 E. of 3rd P. M.

27,055 69 Coles, *Charleston*, T. 12 N., R. 9 E. of 3rd P. M.

25,504 70 Edgar, *Paris*, T. 13 and 14 N., R. 11 and 12 W. of 2nd P. M.

21,900 71 Clark, *Marshall*, T. 11 N., R. 12 W. of 2nd P. M.

13,762 72 Cumberland, *Toledo*, T. 10 N., R. 9 E. of 3rd P. M.

30,282 73 Shelby, *Shelbyville*, T. 11 N., R. 3 and 4 E. of 3rd P. M.

28,086 74 Montgomery, *Hillsboro*, T. 8 N., R. 4 W. of 3rd P. M.

27,705 75 Macoupin, *Carlinville*, T. 10 N., R. 7 W. of 3rd P, M.

23,014 76 Greene, *Carrollton*, T. 10 N., R. 12 W. of 3rd P. M.

7,471 77 Calhoun, *Hardin*, T. 10 S. N., R. 2 W. of 4th P. M.

15,545 78 Jersey, *Jerseyville*, T. 8 N., R. 11 W. of 3rd P. M.

50,141 79 Madison, *Edwardsville*, T. 4 N., R. 8 W. of 3rd P. M.

80 Alton, T. 5 N., R. 9 and 10 W. of 3rd P. M.; stone quarries, iron and glass works, woolen mill, box and cracker factories.

14,873 81 Bond, *Greenville*, T. 5 N., R. 3 W. of 3rd P. M.

23,243 82 Fayette, *Vandalia*, T. 6 N., R. 1 E. of 3rd P. M.; former capital.

18, 924   83   Effingham, *Effingham*, T. 8 N., R. 6 E. of 3rd P. M.

14, 515   84   Jasper, *Newton*, T. 6 N., R. 9 E. of 3rd P. M.

16, 190   85   Crawford, *Robinson*, T. 7 N., R. 12 W. of 2nd P. M.

13, 663   86   Lawrence, *Lawrenceville*, T. 3 N., R. 12 W. of 2nd P. M.

15, 546   87   Richland, *Olney*, T. 3 and 4 N., R. 10 E. of 3rd P. M.

16, 195   88   Clay, *Louisville*, T. 4 N., R. 6 E. of 3rd P. M.

23, 691   89   Marion, *Salem*, T. 2 N., R. 2 E. of 3rd P. M.

18, 718   90   Clinton, *Carlyle*, T. 2 N., R. 2 W. of 3rd P. M.

61, 850   91   St. Clair, *Belleville*; T. 1 N., R. 8 W. of 3rd P. M.; nail factory, iron works and coal mines.

         92   East St. Louis, T. 2 N., R. 9 and 10 W. of 3rd P. M.; union stock yards, iron works, coal mines, canning establishment and railroad center.

         93   St. Louis, Mo.

13, 682   94   Monroe, *Waterloo*, T. 2 S., R. 9 and 10 W. of 3rd P. M.

25, 691   95   Randolph, *Chester*, T. 7 S., R. 7 W. of 3rd P. M.; Southern Illinois Penitentiary.

         96   Kaskaskia, T. 6 S., R. 7 W. of 3rd P. M.; first capital.

21,117 97 Washington, *Nashville*, T. 2 S., R. 3 W. of 3rd P. M.

20,686 98 Jefferson, *Mount Vernon*, T. 2 S., R. 3 E. of 3rd P. M.

21,297 99 Wayne, *Fairfield*, T. 2 S., R. 8 E. of 3rd P. M.

8,600 100 Edwards, *Albion*, T. 2 S., R. 10 E. of 3rd P. M.

9,945 101 Wabash, *Mt. Carmel*, T. 1 S., R. 12 W. of 2nd P. M.

23,089 102 White, *Carmi*, T. 5 S., R. 9 E. of 3rd P. M.

16,712 103 Hamilton, *McLeansboro*, T. 5 S., R. 6 E. of 3rd P. M.

16,129 104 Franklin, *Benton*, T. 6 S., R. 3 E. of 3rd P. M.

16,008 105 Perry, *Pinckneyville*, T. 5 S., R. 3 W. of 3rd P. M.

22,508 106 Jackson, *Murphysboro*, T. 9 S., R. 2 W. of 3rd P. M.

107 Carbondale, T. 9 S., R. 1 W. of 3rd P. M.; Southern Illinois Normal University, coal mines.

19,326 108 Williamson, *Marion*, T. 9 S., R. 2 and 3 E. of 3rd P. M.

15,940 109 Saline, *Harrisburg*, T. 9 S., R. 6 E. of 3rd P. M.

12,862 110 Gallatin, *Shawneetown*, T. 9 S., R. 10 E. of 3rd P. M.; salt springs in vicinity.

6,024 111 Hardin, *Elizabethtown*, T. 12 S., R. 8 E. of 3rd P. M.

13,256 112 Pope, *Golconda*, T. 13 S., R. 7 E. of 3rd P. M.

13,079 113 Johnson, *Vienna*, T. 13 S., R. 3 E. of 3rd P. M.

18,100 114 Union, *Jonesboro*, T. 12 S., R. 1 and 2 W. of 3rd P. M.

       115 Anna, T. 12 S., R. 1 W. of 3rd P. M.; State Insane Asylum.

14,809 116 Alexander, *Cairo*, T. 17 S., R. 1 W. of 3rd P. M.; river trade.

9,507 117 Pulaski, *Mound City*, T. 16 S., R. 1 E. and R. 1 W. of 3rd P. M.

10,443 118 Massac, *Metropolis*, T. 16 S., R. 4 E. of 3rd P. M.

       119 Vincennes, Ind.

       120 Terre Haute, Ind.

RIVERS AND CREEKS.

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121 Kishwaukee.

122 Rock.

123 Meredesta Creek.

124 Fox.

125 Des Plaines.

126 Kankakee.

127 Illinois.

128 Spoon.

129 Le Main or Crooked Creek.

130 Sangamon.

131 Salt Creek.
132 Macoupin Creek.
133 Kaskaskia.
134 Crooked Creek.
135 DeGognia Creek.
136 Little Muddy.
137 Big Muddy.
138 Mill Creek.
139 Cache.
140 Saline.
141 Little Wabash.
142 Big Muddy Creek.
143 Bonpas Creek.
144 Embarras.
145 Wabash.
146 Ohio.
147 Mississippi.
148 Missouri.
149 Des Moines.

BOUNDARIES.

150 Wisconsin.
151 Lake Michigan.
152 Indiana.
153 Kentucky.
154 Missouri.
155 Iowa.

RAILROADS.

The following are some of the principal railroad lines of the State, many of them having branches and connections not shown on the map :

156 Chicago & Northwestern.
157 Chicago, Burlington & Quincy.
158 Chicago, Rock Island & Pacific.
159 Chicago, Alton & St. Louis.
160 Illinois Central.
161 Indiana, Bloomington & Western.
162 Wabash, St. Louis & Pacific.
163 Toledo, Cincinnati & St. Louis.
164 Ohio & Mississippi.
165 Louisville & Nashville.
166 Illinois & Michigan Canal.

There are railroad bridges across the Mississippi river at St. Louis, Louisiana and Hannibal, Mo. ; Quincy and Rock Island, Ill. ; Keokuk, Clinton, Burlington and Dubuque, Iowa.

SURVEY LINES.

167 Third principal meridian.
168 Base line of 2nd and 3rd principal meridians
169 Meeting of the surveys east from the 3rd and west from the 2nd principal meridian.
170 4th principal meridian.
171 Base line of 4th principal meridian.

—*FOR*—

Outline Maps,

    Globes,

        Blackboards,

            Charts,

                Pointers,

                    Crayons

                          and Erasers,

Reference Books,

    Dictionaries,

        School Officers' Books

        and Blanks,

            Teachers' Registers,
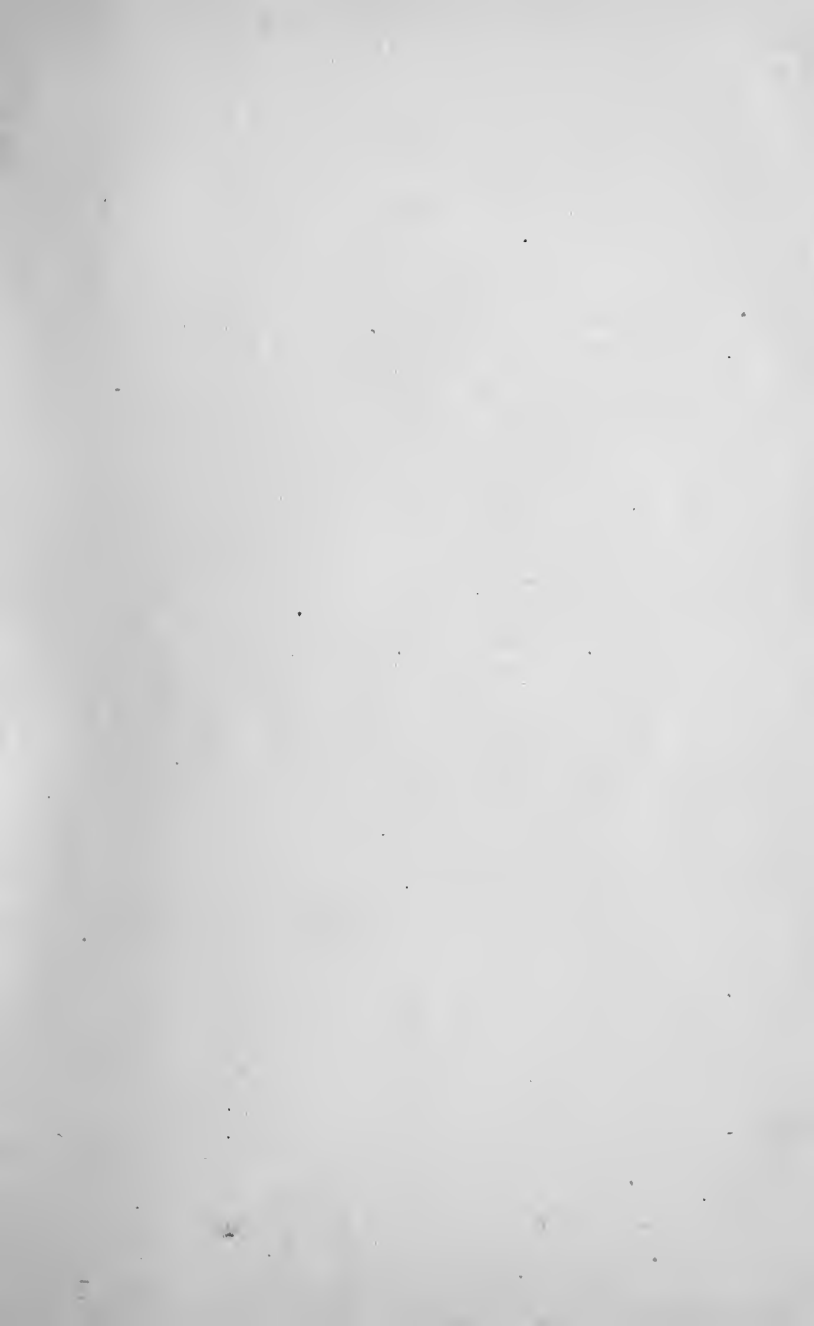
Blank Reports and

    Professional Books and Papers,
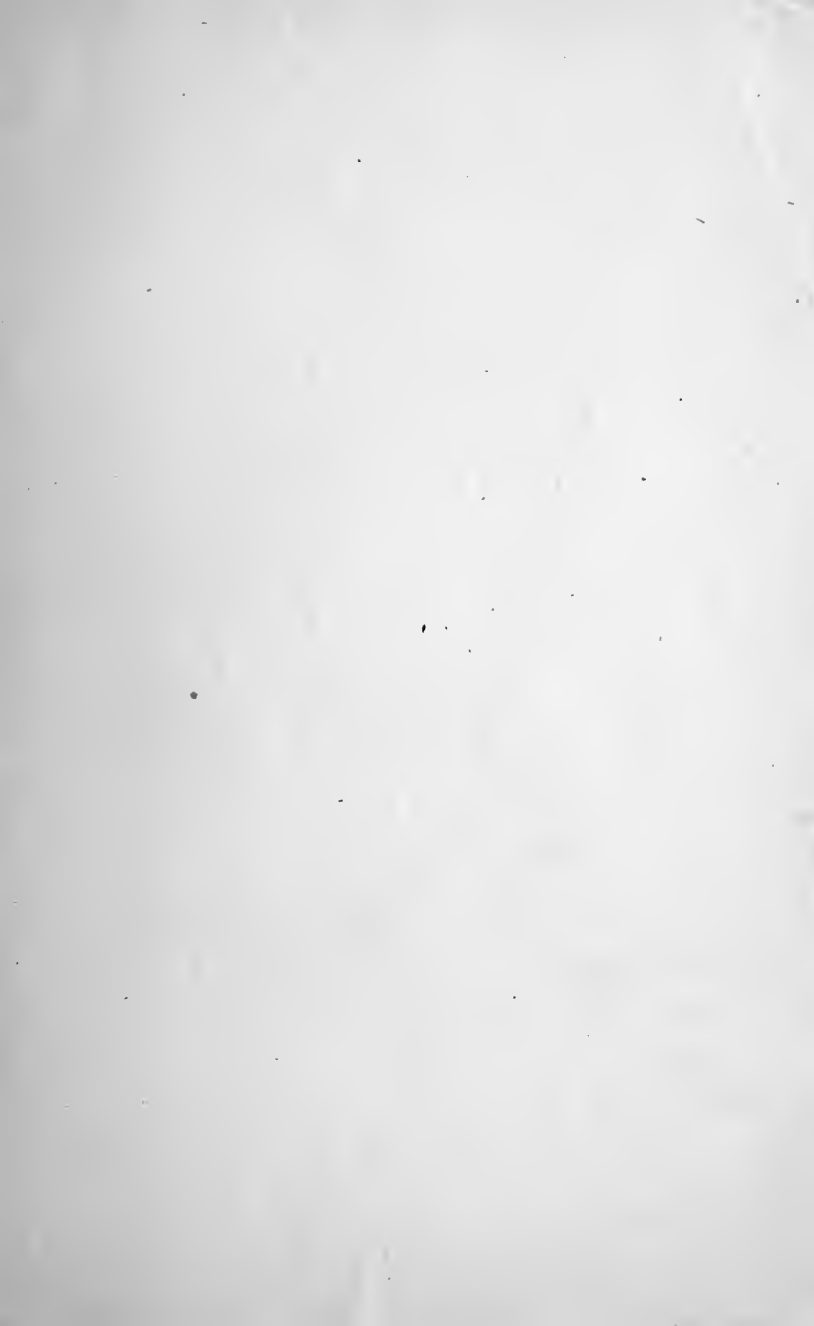
        School and Church Furniture,

Address:

N. N. McCullough,
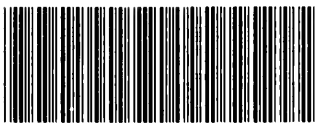### *SPRINGFIELD, ILLINOIS.*